

Environmental Protection Agency

§ 60.54

§ 60.52 Standard for particulate matter.

(a) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator subject to the provisions of this part shall cause to be discharged into the atmosphere from any affected facility any gases which contain particulate matter in excess of 0.18 g/dscm (0.08 gr/dscf) corrected to 12 percent CO₂.

[39 FR 20792, June 14, 1974, as amended at 65 FR 61753, Oct. 17, 2000]

§ 60.53 Monitoring of operations.

(a) The owner or operator of any incinerator subject to the provisions of this part shall record the daily charging rates and hours of operation.

§ 60.54 Test methods and procedures.

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standard in § 60.52 as follows:

(1) The concentration (c_{12}) of particulate matter, corrected to 12 percent CO₂, shall be computed for each run using the following equation:

$$c_{12} = c_s (12/\%CO_2)$$

where:

c_{12} =concentration of particulate matter, corrected to 12 percent CO₂, g/dscm (gr/dscf).

c_s =concentration of particulate matter, g/dscm (gr/dscf).

%CO₂=CO₂ concentration, percent dry basis.

(2) Method 5 shall be used to determine the particulate matter concentration (c_s). The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine CO₂ concentration (%CO₂).

(i) The CO₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run.

If the particulate run has more than 12 traverse points, the CO₂ traverse points may be reduced to 12 if Method 1 is used to locate the 12 CO₂ traverse points. If individual CO₂ samples are taken at each traverse point, the CO₂ concentration (%CO₂) used in the correction equation shall be the arithmetic mean of the sample CO₂ concentrations at all traverse points.

(ii) If sampling is conducted after a wet scrubber, an "adjusted" CO₂ concentration [(%CO₂)_{adj}], which accounts for the effects of CO₂ absorption and dilution air, may be used instead of the CO₂ concentration determined in this paragraph. The adjusted CO₂ concentration shall be determined by either of the procedures in paragraph (c) of this section.

(c) The owner or operator may use either of the following procedures to determine the adjusted CO₂ concentration.

(1) The volumetric flow rates at the inlet and outlet of the wet scrubber and the inlet CO₂ concentration may be used to determine the adjusted CO₂ concentration [(%CO₂)_{adj}] using the following equation:

$$(\%CO_2)_{adj} = (\%CO_2)_{di} (Q_{di}/Q_{do})$$

where:

(%CO₂)_{adj}=adjusted outlet CO₂ concentration, percent dry basis.

(%CO₂)_{di}=CO₂ concentration measured before the scrubber, percent dry basis.

Q_{di} =volumetric flow rate of effluent gas before the wet scrubber, dscm/min (dscf/min).

Q_{do} =volumetric flow rate of effluent gas after the wet scrubber, dscm/min (dscf/min).

(i) At the outlet, Method 5 is used to determine the volumetric flow rate (Q_{do}) of the effluent gas.

(ii) At the inlet, Method 2 is used to determine the volumetric flow rate (Q_{di}) of the effluent gas as follows: Two full velocity traverses are conducted, one immediately before and one immediately after each particulate run conducted at the outlet, and the results are averaged.

(iii) At the inlet, the emission rate correction factor, integrated sampling and analysis procedure of Method 3B is used to determine the CO₂ concentration [(%CO₂)_{di}] as follows: At least nine sampling points are selected randomly from the velocity traverse points and are divided randomly into three sets,